



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,865	12/14/2005	Shojiro Shibata	450100-05110	3686
<div>7590 William S Frommer Frommer Lawrence & Haug 745 Fifth Avenue New York, NY 10151</div> <div>02/17/2009</div>				
<div>EXAMINER</div> <div>LIEW, ALEX KOK SOON</div>				
<div>ART UNIT</div> <div>2624</div>		<div>PAPER NUMBER</div>		
<div>MAIL DATE</div> <div>02/17/2009</div>		<div>DELIVERY MODE</div> <div>PAPER</div>		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/560,865

Applicant(s)

SHIBATA ET AL.

Examiner

ALEX LIEW

Art Unit

2624

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 12/14/05, 2/4/08
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim Objections

Claims 1-16 are objected to because of the following informalities: The language from the claims appears to be a direct translation from the Japanese application, which is repetitive and hard to understand. For example, in claim 2, “whether or not” was repeated twice, which does not need to be. Appropriate correction is required.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 14 and 16 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent¹ and recent Federal Circuit decisions² indicate that a statutory “process” under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim recites a series of steps or acts to be performed, the claim neither transforms underlying subject matter nor is positively tied to another statutory category that accomplishes the claimed method steps, and therefore does not qualify as a statutory process. For example the method including steps of acquiring, determining,

¹ *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

² *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

coding and decoding is of sufficient breadth that it would be reasonably interpreted as a series of steps completely performed mentally, verbally or without a machine. The apparatus that are tied to these claims does not necessarily contain any computer/image processor, eg. '... an image recording apparatus ...' can simply be a scanner and a scanner does not contain any computer/image processor.

2. Claims 7 and 11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 7 and 11 define a 'program' embodying functional descriptive material (i.e., a computer program or computer executable code). However, the claim does not define a "computer-readable medium or computer-readable memory" and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). The scope of the presently claimed invention encompasses products that are not necessarily computer readable, and thus NOT able to impart any functionality of the recited program. The examiner suggests amending the claim(s) to embody the program on "computer-readable medium" or equivalent; assuming the specification does NOT define the computer readable medium as a "signal", "carrier wave", or "transmission medium" which are deemed non-statutory (refer to "note" below). Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 5-12 and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kitamura (EP 1 069 779 A1).

With regards to claim 1, Kitamura discloses an image processing apparatus for subjecting image data of a base band or image data, which is coded up to a midstep, to coding processing up to a midstep or to perfect coding processing, comprising:

acquisition means for acquiring information as to coding executed to the image data in the past (see paragraph 12, extracts past encoding parameters and figure 14, 105); and

control means for controlling the coding processing up to a midstep or the perfect coding processing of the image data of the base band or the image data coded up to the midstep (paragraph 15, re-encoding and figure 14, 106), wherein, when a coding picture type is a predetermined picture type (figure 32, picture type determination process), the control means determines whether or not the information as to coding is to be used to the coding processing based on the information as to the coding acquired by the acquisition means and on a condition as to the coding processing executed to the

image data by the image processing apparatus (figure 14, 105, 106, 107 steps to coding a video signal).

With regards to claim 3, Kitamura discloses determines whether or not the information as to coding is to be used based on whether or not the amount of generated code in the decoding described in the information as to coding is equal to or less than a predetermined value (see paragraph 336, the limit is the predetermined value).

With regards to claims 5-7, see the rationale for claim 1. In addition, see paragraph 127, the encoder is a computer and a computer contains at least one processor requiring instructions.

With regards to claim 8, see the rationale for claim 1. In addition, Kitamura discloses decoding means for decoding the image data, which is supplied thereto, perfectly or imperfectly (figure 14, 102, 103 and 104 is the decoder section, and see paragraph 15); and coding means for subjecting the image data of a baseband, which is perfectly decoded by the decoding means, or the image data, which is created by being imperfectly decoded by the decoding means and coded up to a midstep, to coding processing up to a midstep or to perfect coding processing (see figure 14, the video signal is a baseband signal); and the control means determines, when a coding picture type is a predetermined picture type, whether or not the information as to coding is to be used to the coding processing based on the information as to the coding acquired by

the acquisition means and on a condition as to the coding processing (see figure 32, determines past coding parameters).

With regards to claims 9-11 see the rationale for claims 1 and 8. In addition, see paragraph 127, the encoder is a computer and a computer contains at least one processor requiring instructions.

With regards to claim 12, see the rationale for claims 1 and 8. In addition, Kitamura discloses recording control means for controlling the record of the image data coded by the coding means (see paragraph 13, the encoding device superimpose information indicating the selected past encoding parameters, these parameters are recorded onto `history_stream()`).

With regards to claim 14, see the rationale for claims 1, 8 and 12. In addition, Kitamura discloses a coding step for subjecting the image data of a baseband, which is perfectly decoded by processing of the decoding step, or the image data, which is created by being imperfectly decoded by processing of the decoding step and coded up to a midstep, to coding processing up to a midstep or to perfect coding processing (see figure 14, signal is first decoded, 102 and then reencoded at 105).

With regards to claims 15 and 16, see the rationale for claims 1 and 8. In addition, Kitamura discloses reproduction means for reproducing the image data recorded to a

predetermined recording medium (paragraph 483, video is retrieved from a magnetic drive).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura '779 in view of Yim (US pat no 6,445,828).

With regards to claim 2, Kitamura discloses all the limitations of claim 1; Kitamura discloses matching current bit sequence with past bit sequences and a macro-block assignment in user data which contain macro-block phase information (see paragraphs 262 and 287), but does not disclose the phase of a macro block in the past coding described in the information as to coding agrees with the phase of the macro block of the coding processing. Yim discloses the macro block in the past coding described in the information as to coding agrees with of the macro block of the coding processing (column 1, lines 48-55). One skilled in the art would include such feature because the reference macro-block is lined up with the current macro-block to obtain a difference block which is then coded with DCT, preparing data to compress.

With regards to claim 4, see the rationale for claim 2. Kitamura also discloses output means which is supplied with first coding data supplied to another image processing apparatus that decodes the image data and with second coding data created by the coding processing and outputs the first coding data (figure 14, 102, 103 and 104 are decoding process); wherein the amount of the generated code in the decoding described in the information as to coding is equal to or less than the predetermined value (see figure 14, 5Mbps is the predetermined value); and the position and the magnitude of an image frame in the past coding described in the information as to coding agree with those of the coding processing (paragraphs 262 and 287).

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura '779 in view of Shimizu (US pat no 5,991,452).

With regards to claim 13, Kitamura discloses all the limitations of claim 12, but does not disclose coding image data at different positions. Shimizu discloses coding image data at different positions (see figure 4, ST1-3). One skilled in the art would include such feature because to only limit image processing on areas in the image which are of interest, to save processing power.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX LIEW whose telephone number is (571)272-8623 or cell (917)763-1192. The examiner can be reached anytime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew C Bella/
Supervisory Patent Examiner, Art
Unit 2624

Alex Liew
AU2624
2/7/09